

Camp Navajo OB/OD Site Environmental News



Arizona Department of Environmental Quality

March 2003

The Arizona Department of Environmental Quality (ADEQ) has published this factsheet to inform community members near the Camp Navajo Department of Defense (DoD) open burn/open detonation (OB/OD) area of current site activities. If you would like additional information, please complete the mailing list form on the last page of this notice.

Camp Navajo Site History

Camp Navajo is located in Bellemont, Arizona, 12 miles west of Flagstaff and 17 miles east of Williams. The facility includes 28,347 acres of forest, rolling hills and some steep hilly terrain. Camp Navajo was established in 1942 to serve as a storage depot for explosives and other strategic war supplies, a training site for reservists and for the *demilitarization* and land disposal of obsolete or unserviceable *munitions*. Since 1982, the Arizona Army National Guard (AZARNG) has used the facility for storage, training and other support activities.

The OB/OD area is an area where excess, obsolete and unserviceable munitions were destroyed either by burning or by detonation. While the demolition area encompasses approximately 5,000 acres, OB/OD activities appear to have been concentrated in a central 500-acre area, with the surrounding area serving as a buffer.

In 1994, the Department of the Army granted a license for the installation to AZARNG for use as a training site. In a memorandum of agreement between the Army and the AZARNG, under the *Base Realignment and Closure (BRAC) Act*, the Army maintained responsibility for cleanup activities at the facility.

Environmental Hazards in the OB/OD Area

The Army used Camp Navajo for more than 50 years for the demilitarization and land disposal of obsolete or unserviceable conventional ammunition, explosives and *mustard gas*. No biological warfare agents are known to be on the property. Over the years, a wide variety of hazardous substances, wastes and munitions were

stored, tested and expended at the facility. Environmental studies of the facility began in 1979. Among the *contaminants* identified are *heavy metals*, *solvents*, *volatile organic compounds (VOCs)*, *pesticides*, *white phosphorus*, *unexploded ordnance (UXO)* and chemicals resulting from exploded ordnance.

Camp Navajo personnel entering the OB/OD area are specially trained to handle the contaminants and hazards present at the site. Warning signs have been posted on the fenced perimeter regarding the extreme danger. Hunters are not to enter the OB/OD area to retrieve their game due to the potential risk of encountering UXO. The UXO may be hidden under dirt, shrubbery or rocks. UXO is not easily visible so entering the OB/OD area is not permitted by unauthorized personnel.

The contamination at the facility did not qualify Camp Navajo for inclusion on the *Environmental Protection Agency's Superfund National Priorities List (NPL)*. However, it is subject to state and federal laws and is being cleaned up to state and federal standards according to the Resource Conservation and Recovery Act (RCRA) under the DoD's *Installation Restoration Program*.



Work Plans and Investigations at the OB/OD Area

Remediation activities are nearly complete throughout the base with the exception of the OB/OD area. The OB/OD area was used until 1994, operating under an interim permit issued by ADEQ. In 1998, a closure plan was submitted by Army Environmental Center for the OB/OD area, but ADEQ asked for additional sampling and site cleanup, an agreement for which was negotiated in June 2002. Current investigations and accomplishments at the OB/OD site include:

- Repairing and replacing portions of the fence around the OB/OD area
- Conducting an *airborne ordnance detection survey*
- Posting of warning signs around the OB/OD area in English and Spanish
- Conducting an archive search report
- Performing detonation pit sampling for contaminants
- Conducting biological and cultural resources surveys
- Removing debris from the tributary to Volunteer Canyon (aka white phosphorous detonation area)
- Finalizing the community relations plan update
- Distributing a hunting advisory flyer
- Establishing and utilizing the *stakeholders advisory group* (SAG)

ADEQ is working closely with the National Guard Bureau (NGB) and AZARNG to ensure implementation of proposed investigation and remedial actions at the OB/OD area. Several of the proposed activities are in progress or are planned for implementation in the fall of 2002 and spring of 2003.

Community Involvement and Outreach

The Camp Navajo OB/OD site SAG was established in February 2002 and has been meeting on a regular basis since its inception. The SAG consists of three local citizens and members from various stakeholder groups, including the Arizona Game and Fish Department, the U.S. Fish and Wildlife Service, the NGB, the AZARNG, the U.S. Forest Service and the Grand Canyon Trust. The responsibilities of the SAG include:

- Providing technical assistance on remediation efforts
- Providing input on federal and local laws and regulations
- Assisting with distributing information from ADEQ, NGB and AZARNG to the community
- Ensuring that the opinions and concerns of the residents and stakeholders are accurately understood by ADEQ, NGB, AZARNG and Army

All SAG meetings are open to the public. Meetings are

posted on ADEQ's Web site (www.adeq.state.az.us) and information line ((800) 234-5677, Ext. 771-4360).

If you would like be on the Camp Navajo mailing list, complete the mailing coupon on the last page of this notice or contact Community Involvement Coordinator Alex Zavala at (800) 234-5677, Ext. 771-4410.

For more information regarding project management, please contact ADEQ Project Manager Lou Minkler at (800) 234-5677, Ext. 771-4187.

Glossary

Airborne ordnance detection survey – An airborne ordnance detection survey consists of a low flying helicopter equipped with magnetometers to detect ground anomalies.

Base Realignment and Closure (BRAC) Act – The BRAC Act is a federal law that reduces DoD assets by closing or transferring military installations.

Contaminants – A contaminant is a harmful or hazardous material introduced into the environment that is not normally found there, or not naturally occurring. Though there are substances that occur naturally that may be harmful (arsenic, radon) in this context we are referring only to those substances that have been introduced to the environment via human activities.

Demilitarization – Demilitarization is a term used when ordnance is defused, detonated or disassembled.

Heavy metals – Heavy metals are a group of toxic materials, including arsenic, chromium, copper, lead, mercury, silver and zinc, that are often present at mines, DoD sites, mineral processing and industrial sites, including battery recycling and metal plating operations.

Installation Restoration Program – The Installation Restoration Program was developed by the DoD to identify, assess, characterize and clean up or control contamination from past hazardous waste disposal operations and hazardous materials spills at DoD facilities.

Munitions – Munitions include war equipment and supplies, like guns and ammunition, of a military force.

Mustard gas – Mustard gas refers to several manufactured chemicals, including sulfur mustard, that do not occur naturally in the environment. It is actually a liq-

uid and is not likely to change into a gas immediately if it is released at ordinary temperatures. As a pure liquid, it is colorless and odorless, but when mixed with other chemicals, it looks brown and has a garlic-like smell.

Ordnance – The term ordnance defines military weapons as a whole, along with ammunition and the equipment to maintain them.

Pesticides – A pesticide is a substance or mixture of substances intended to prevent or mitigate infestation by, or destroy or repel, any pest. Pesticides can accumulate in the food chain and/or contaminate the environment if misused.

Remediation – Remediation is the term used for actions to deal with a release or threat of release of a hazardous substance that could affect humans and/or the environment. The term is sometimes used interchangeably with the terms cleanup, remedial action, removal action, response action or corrective action.

Solvents – Solvents are chemical products, usually liquid, used to dissolve or disperse other substances.

Stakeholder Advisory Group (SAG) – A SAG consists of a diverse group of stakeholders interested in and/or affected by the presence of a hazardous substance site. The purpose of each member is to inform and advise the NGB, AZARNG and ADEQ.

U.S. Environmental Protection Agency's Superfund National Priorities List (NPL) – The NPL is EPA's list of the most serious hazardous waste sites identified for possible long-term remedial response under the Federal Superfund (CERCLA).

Volatile organic compounds (VOCs) – A VOC is a member of a group of compounds that evaporate easily at room temperature. VOCs, such as trichloroethene, tetrachloroethene, benzene and toluene are often used for metal degreasing, circuit board cleaning, dry cleaning, wood preserving and in gasoline.

White phosphorus – The military has commonly used white phosphorus as an incendiary agent or as an igniter for munitions. It commonly is found in hand grenades, mortar and artillery rounds, and smoke bombs.